4.2.3 HARVEST CONCERNS

Low landings in recent years are the result of several environmental disturbances that have occurred since the 1980s. A red tide event occurred in October of 1987 resulting in a significant reduction in landings, especially in Bogue Sound where consistently high bloom concentrations were found. A further reduction in harvest was also seen following the 1999 hurricane season where tropical storm Dennis saturated the ground and Hurricane Floyd caused massive flooding in eastern North Carolina. After these events, landings were reduced to extremely low levels.

In addition, there has been a growing concern in North Carolina about predation on bay scallops by cownose rays. Cownose rays feed in areas where bay scallops occur in high densities. The period of high mortality of bay scallops occurs during the summer before spawning and therefore do not contribute to the population the following year. The site-specific selection of seagrass beds in these areas by large schools of cownose rays may be related to a highly efficient feeding behavior as they migrate south resulting in a large number of scallops being lost to the fishery.

These low landings are also a socioeconomic concern. Other issues of concern are the harvest of whole and roe-on scallops from polluted areas and the prohibition of soaking scallop meats.

Specific issues, options, and potential actions are outlined in Sections 9.0, and 10.0.

4.2.4 STOCK ENHANCEMENT

Currently, there is no enhancement program for bay scallops in North Carolina. However, with low population levels coastwide, other states have considered stock enhancement and sanctuaries as management strategies to revive depleted fisheries. Restocking of bay scallops and enhancement through spawner transplants by cultured release would be difficult and expensive without the ability to produce and raise them in a state hatchery. Currently, there are no state operated hatcheries for shellfish restoration in North Carolina. In 2005 state legislators approved funding of $600,000 annually for two years to investigate options for incorporating oyster hatcheries at the North Carolina aquariums. The use of hatcheries for species other than oysters has been discussed. These hatcheries could allow for small scale seeding projects and public education for future programs. Productive bay scallop areas also need to be identified

Spawning sanctuaries have already been established for oysters that provide a protected haven from fishing effort, promote growth and survivability, and have the potential to establish populations beyond the sanctuary boundaries. It is still unknown how many acres of bottom need to be protected to create a sanctuary that will function properly. Valuable input from commercial fishermen is needed in the development of these areas. Designated sanctuaries would provide a platform to introduce bay scallops to areas where habitat and harvest would be protected.